



WHAT IS DUCTILCRETE???

- DUCTILCRETE IS A PATENTED, DUAL LAYER SLAB SYSTEM WHICH DELIVERS HIGH PERFORMANCE SLAB SYSTEMS FOR BOTH INTERIOR SLABS AND EXTERIOR PAVEMENTS
- DESIGNED TO BE VIRTUALLY MAINTENANCE AND CURL FREE
- PROVIDING THE END USER WITH SUPERIOR, STATE OF THE ART SLAB SYSTEMS AT COST COMPETITIVE PRICES
- INCLUSIVE OF THE INDUSTRY'S MOST COMPREHENSIVE 5 YEAR WARRANTY

OUR #1 GOAL IS TO DELIVER VALUE

LESS IS MORE!!!

- 75% REDUCTION IN JOINTS AND JOINT MAINTENANCE
- INCREASED LOAD CAPACITY
- MORE FLEXIBILITY, MORE USABLE SPACE
- VIRTUALLY CURL FREE
- ELIMINATE REBAR AND WWF
- NO REQUIREMENT OF ADDITIONAL DENSIFIERS/HARDENERS
- GUARANTEED F_F F_L VALUES

RESEARCH & DEVELOPMENT

- DUCTILCRETE'S OLDEST SLAB IN PLACE 10+ YEARS
- ALLIANCE FORMED IN APRIL, 2012
- OVER 427 PROJECTS IN PLACE TOTALING OVER
190 MILLION SQUARE FEET
- GROWING ALLIANCE OF NATIONAL INSTALLERS
- DESIGN/BUILD PROCESS-PROVIDING ENGINEERED
STAMPED DRAWINGS
- DC DESIGNS BECOMES THE SLAB ENGINEER OF RECORD

GROWING NUMBER OF
ALLIANCE MEMBERS
ACROSS THE US AND
CANADA



DUAL
LAYER
SYSTEM



DUCTILCRETE HEIDEBED SYSTEM

FORM, POUR, AND ERECT TILT UP PANELS FROM CASTING BED SLAB



HEIDEBED ADVANTAGES



- BENEFITS
 - PROVIDES A WORKING SURFACE FOR OTHER TRADES
 - ENCLOSE THE BUILDING AND AVOID WEATHER CONDITIONS
 - SIGNIFICANT SAVINGS IN SUBBASE REMEDIATION
 - SLABS CAN BE PLACED UNDER ROOF ELIMINATING WEATHER DELAYS
- VERSITILITY
 - INCREASED LOAD CAPACITY
 - THE TOPPING SLAB PROFILE CAN BE MODIFIED TO ACCOMMODATE THE FUTURE TENANT
- AESTHETICS/APPEARANCE OF FINISHED SLAB
 - NO PATCHING REQUIRED
 - NO DAMAGE TO THE FINAL SLAB PRODUCT
 - PANELS ARE FORMED, PLACED, AND ERECTED ON THE BASE SLAB
 - THE SLABS ARE POURED LAST AND HAVE NO EXPOSURE TO DAMAGE BY
 - OTHER TRADES

DUCTILCRETE HEIDEBED SYSTEM

THE RESULT...DUCTILCRETE SLABS WITHOUT THE RESIDUAL EFFECTS OF TILT UP CONSTRUCTION ON THE FINISHED PRODUCT



DEVELOPERS USING DUCTILCRETE

IDI Logistics



RIDGE
DEVELOPMENT™
a Transwestern Company



HILLWOOD
INVESTMENT PROPERTIES
A PEROT COMPANY™



OAKMONT
INDUSTRIAL GROUP

Duke
REALTY



JOHNSON DEVELOPMENT ASSOCIATES, INC.
REAL ESTATE DEVELOPERS



PANATTONI®



THE KEITH CORPORATION



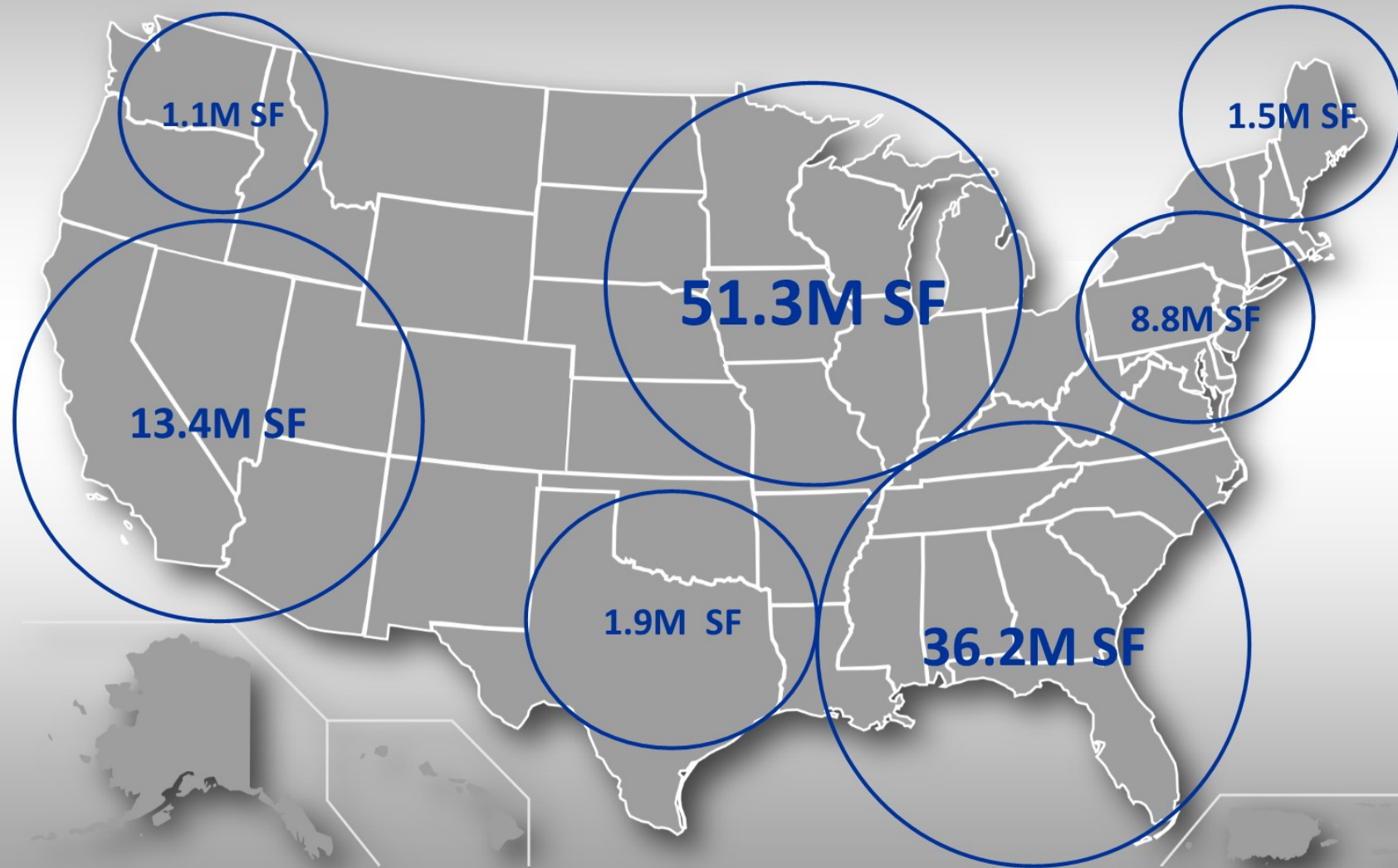
SEEFRIED
INDUSTRIAL PROPERTIES

Ackerman & Co.



PACTRUST
Pacific Realty Associates, L.P.





SATISFIED CLIENTS NATIONWIDE



WeatherTech®

MICHELIN



amazon fulfillment

niagara
TASTE THE PURE DIFFERENCE!

ebay



Kraft Heinz



WHOLE
FOODS
MARKET



Centrella
SINCE 1917



Martignetti
Companies



EASTON-BELL SPORTS

NIPPON SHARYO

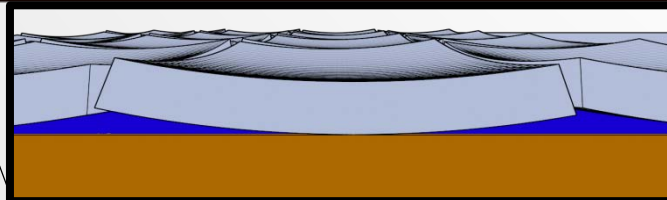
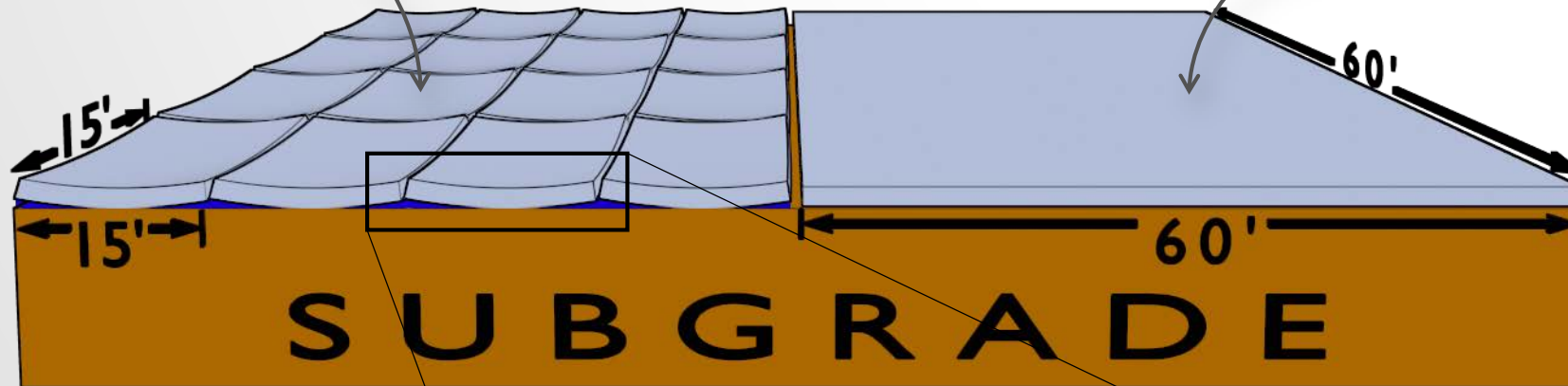
INCREASED LOAD CAPACITY

Ductilcrete remains in contact with the ground resulting in higher load capacities while using thinner profiles.

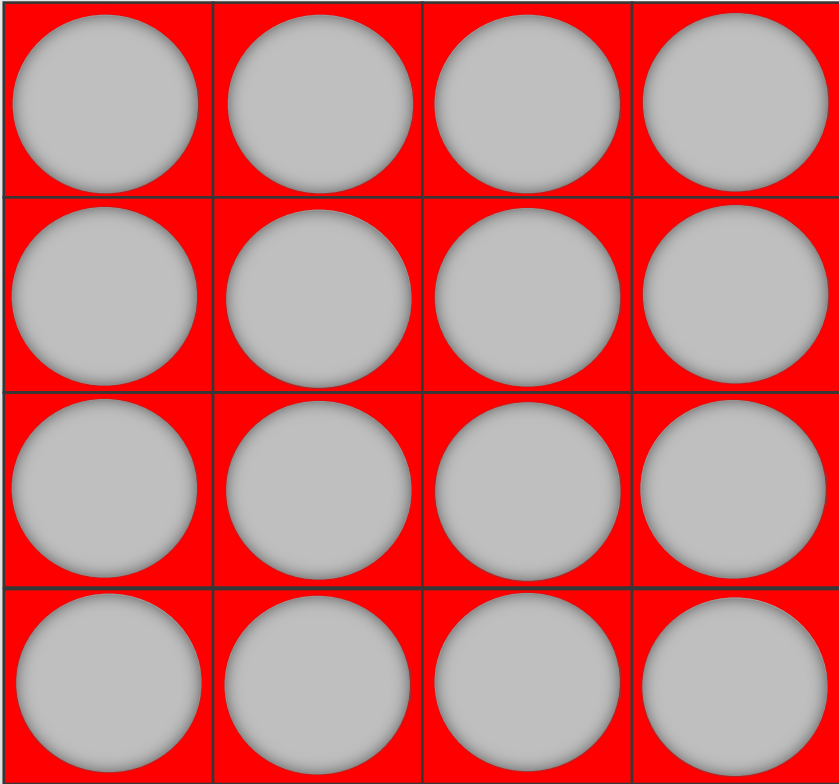
GREATER THAN **30%** OF EACH 15'x15' SECTION OF SLAB IS **NOT** IN CONTACT WITH THE SUB-BASE.

MORE THAN **98%** OF THE DUCTILCRETE SLAB STAYS IN CONTACT WITH THE SUB-BASE.

CONVENTIONAL
(PER ACI)



WITH DUCTILCRETE YOU GET MORE USABLE SPACE AND THUS MORE FLEXIBILITY AS IT PERTAINS TO RACK LAYOUT



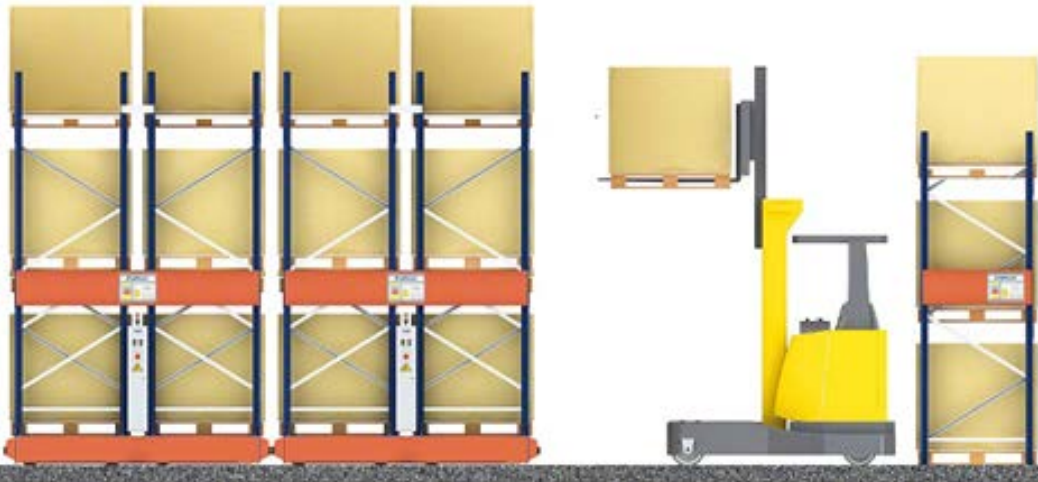
GREATER THAN 30% OF EACH 15'x15' SECTION OF
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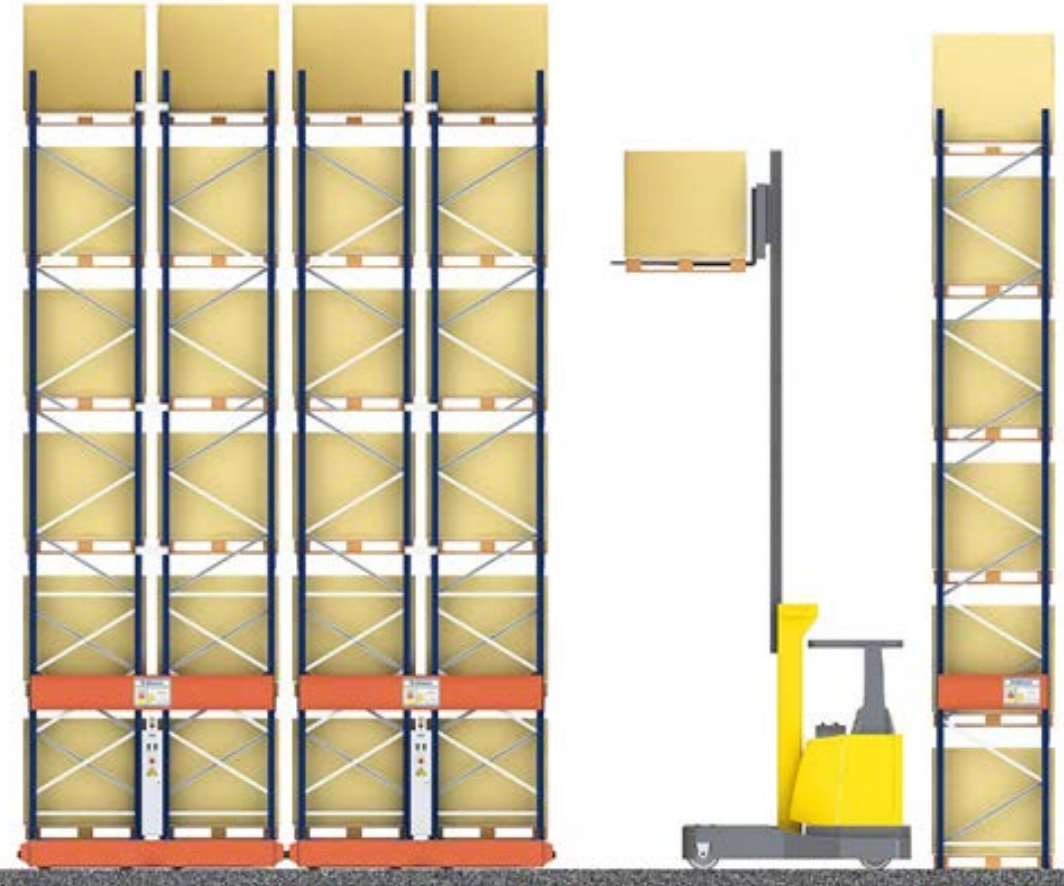
APPROXIMATELY 98% OF THE DUCTILCRETE SLAB
STAYS IN CONTACT WITH THE SUB-BASE.

DUCTILCRETE PROVIDES DOUBLE THE LOAD CAPACITY OF CONVENTIONAL CONCRETE

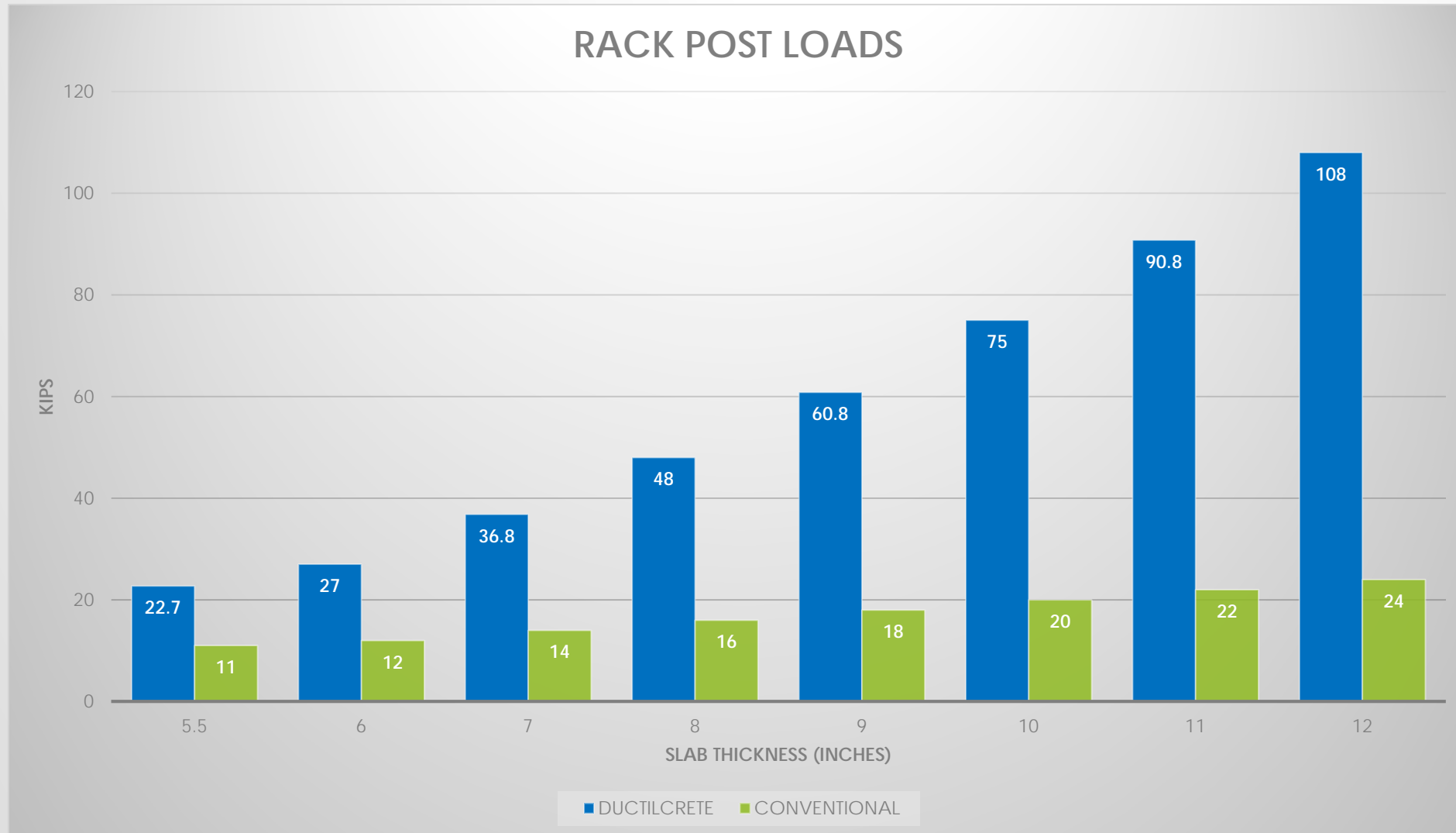
6" CONVENTIONAL SLAB HAS A LOAD CAPACITY OF **12 kips**



6" DUCTILCRETE SLAB HAS A LOAD CAPACITY OF **27 kips**



DUCTILCRETE RACK POST LOAD COMPARISON TO CONVENTIONAL CONCRETE



ADVANTAGES OF DUCTILCRETE SLABS IN COMPARISON TO CONVENTIONAL SLABS

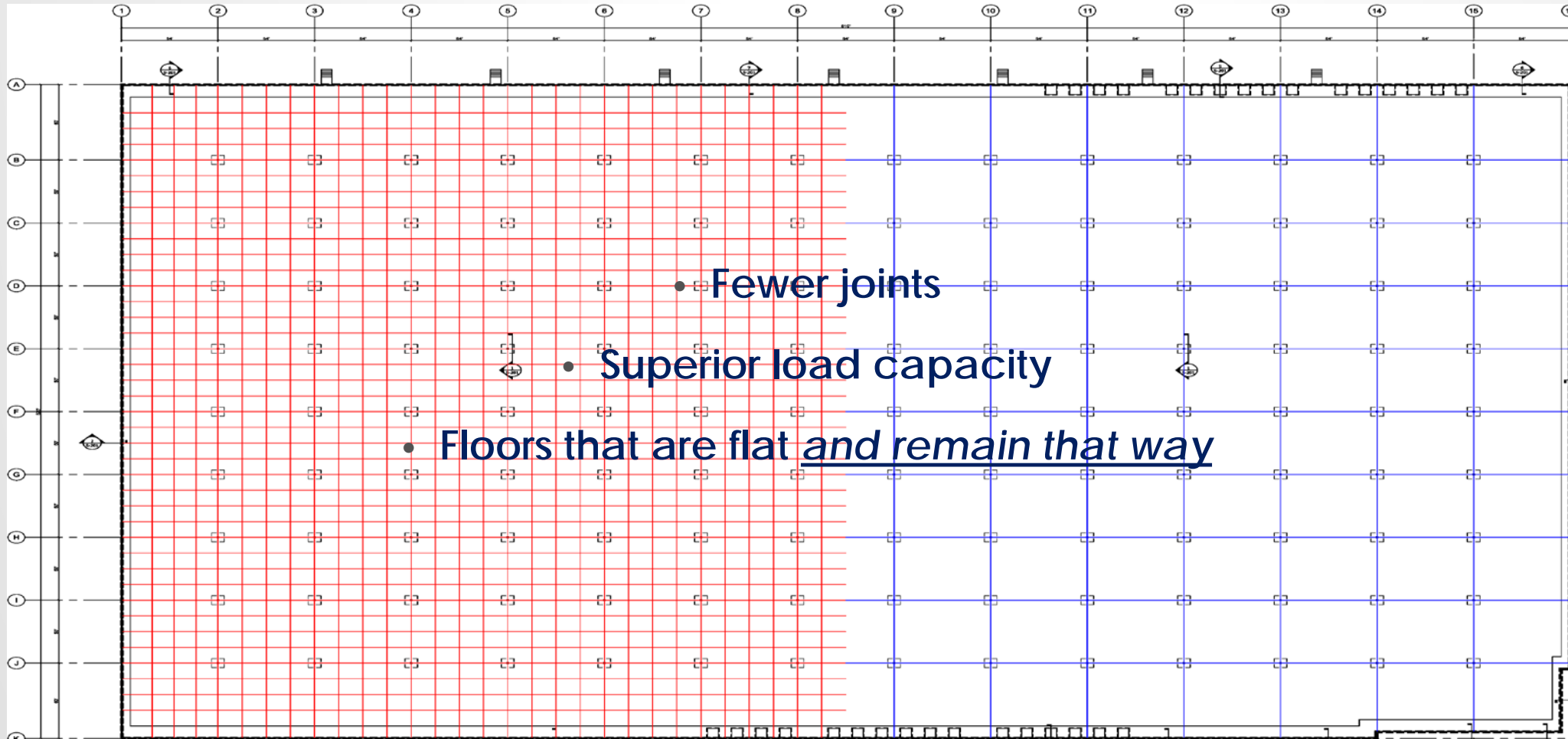
DUCTILCRETE					CONVENTIONAL				
SLAB THICKNESS	5 ½"	6"	7"	8"	SLAB THICKNESS	5 ½"	6"	7"	8"
LOAD CAPACITY/RACK POINT LOADS	22.7 kips	27.0 kips	36.8 kips	48.0 kips	LOAD CAPACITY/RACK POINT LOADS	11 kips	12 kips	14 kips	16 kips
SLAB CURLING	APPROXIMATELY 98% OF THE SLAB REMAINS IN CONTACT WITH THE SUBBASE				SLAB CURLING	APPROXIMATELY 30% OF SLAB REMAINS IN CONTACT WITH SUBBASE			
MAINTAIN SPECIFIED OVERALL FF/FL	90 % OF SPECIFIED VALUES				MAINTAIN SPECIFIED OVERALL FF/FL	NO			
LF OF CRACKS/SF OF SLAB	≈ 1%				LF OF CRACKS/SF OF SLAB	3%			
SAW CUT/JOINT FILL/ JOINT MAINTENANCE	50' TO 60' TO COLUMNS - 75% REDUCTION IN JOINTS AS COMPARED WITH ACI DESIGN				SAW CUT/JOINT FILL/ JOINT MAINTENANCE	JOINT SPACING VARIES FROM 9' TO 15' MAX PER ACI			
FLEXABILITY WITH RACK AND MEZZANINE LAYOUT	NO RESTRICTIONS				FLEXABILITY WITH RACK AND MEZZANINE LAYOUT	2' MINIMUM DISTANCE FROM JOINTS/JOINT INTERSECTIONS			
GUARANTEE	3-5 YEARS				GUARANTEE	1 YEAR			
CRACK REPAIR INCLUDED	>0.030"				CRACK REPAIR INCLUDED	NO			
CURLING REPAIR INCLUDED	YES				CURLING REPAIR INCLUDED	NO			
JOINT ROCKING REPAIR	>0.010"				JOINT ROCKING REPAIR	NO			
JOINT STEPS REPAIR	YES				JOINT STEPS REPAIR	NO			
DELAMINATION REPAIR	>0.002%				DELAMINATION REPAIR	NO			
DETERIORATION AND EXCESSIVE WEAR	>NORMAL WEAR AND TEAR				DETERIORATION AND EXCESSIVE WEAR	NO			

COLUMNS BEARING ON THE SLAB



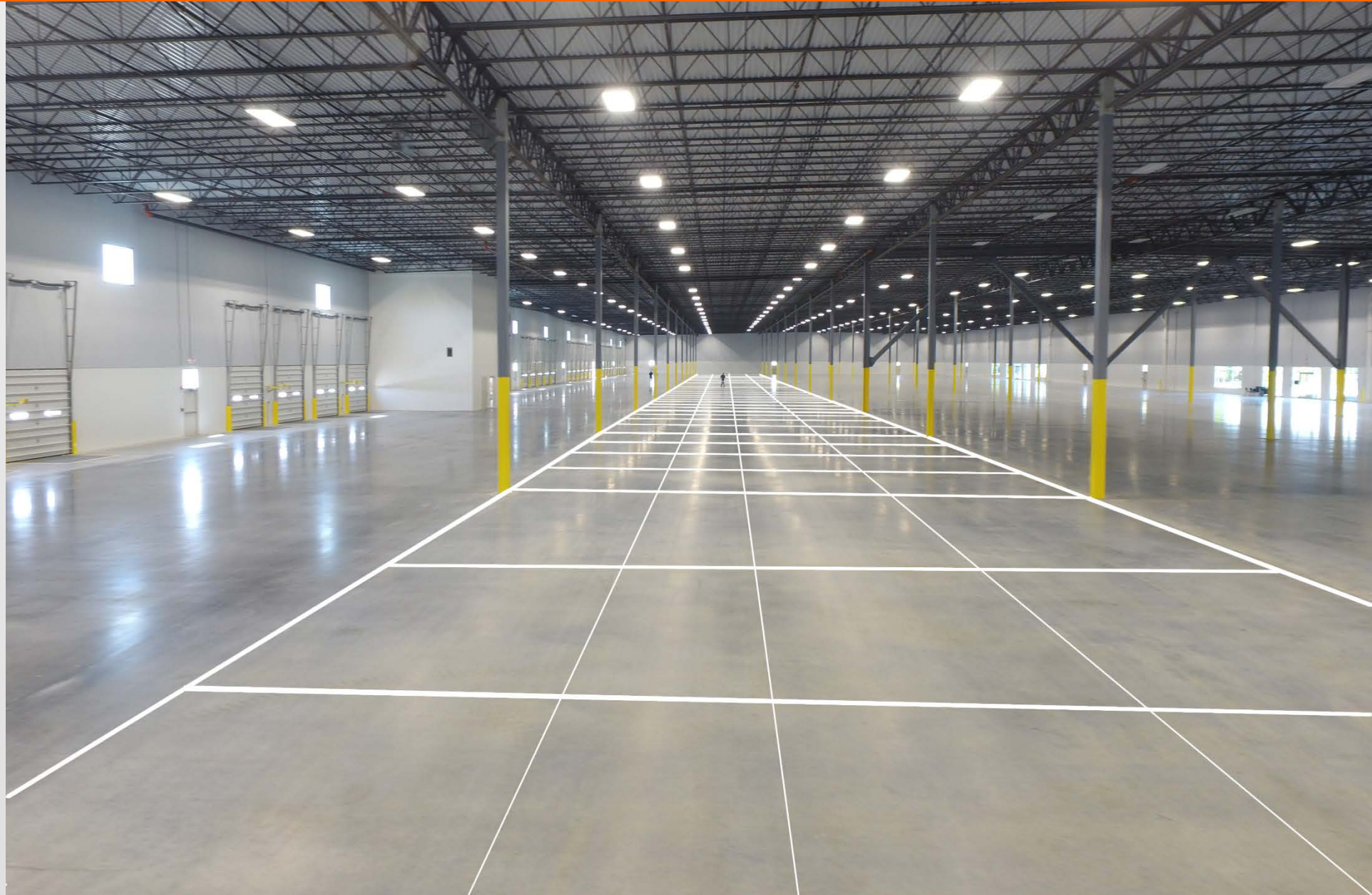
EASTON BELL SPORTS – RANTOUL, IL 800,000 sf - COMPLETED MAY 2013

LET'S COMPARE!!!



Based on 500,000 s.f. warehouse.	8" Conventional (Per ACI)	6" DUCTILCRETE	7" DUCTILCRETE
kips	16.0 kips	27.0 kips	36.8 kips
Joint Quantity	68,000 I.f.	20,000 I.f.	20,000 I.f.
F_F/F_L	35/25	50/40	50/40

JOINTS PER CONVENTIONAL DESIGN

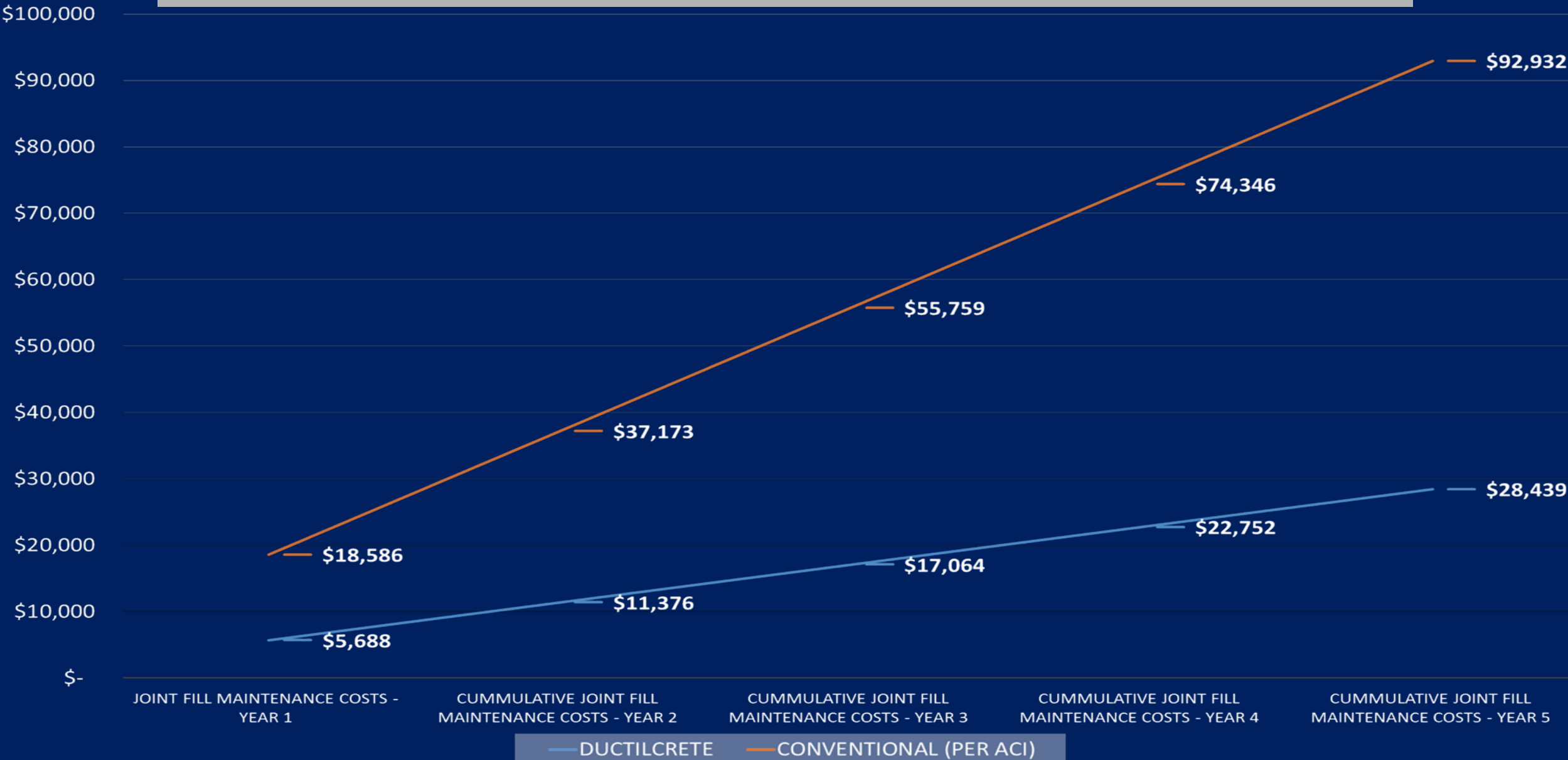


JOINTS PER DUCTILCRETE DESIGN



JOINT MAINTENANCE COMPARISON - CONVENTIONAL DESIGN COMPARED TO DUCTILCRETE

QUANTITIES ARE BASED ON RE-FILL OF 20% OF THE JOINTS IN THE SPEED AISLES ONLY, EACH YEAR, OVER A 5 YEAR PERIOD



TOTAL CUMMULATIVE SAVINGS IN JOINT FILL MAINTENANCE OVER 5 YRS = \$64,493.00 [\$0.31/SF]

Based on 210,600 sf facility

WARRANTY

- F_F/F_L – TO 90% OF ORIGINALLY SPECIFIED VALUES
- CRACKING – RANDOM, CORNER, RADIAL
- CURLING



DUCTILCRETE PAVING

ADVANTAGES

- COMPETITIVE PRICING
- NO REQUIREMENT FOR JOINT FILLER
- DECREASED MAINTENANCE COSTS
- VIRTUALLY NO DELAMINATION
- 3 YEAR WARRANTY



GREEN IMPACT

- REDUCED HEAT ISLAND EFFECT
- REDUCED PROFILE THICKNESS
- REDUCED LIGHTING REQUIRED
- NO VOLATILE ORGANIC COMPOUNDS RELEASED INTO THE ATMOSPHERE
- ABSORPTION OF CARBON FROM ATMOSPHERE
- AVOIDANCE OF POTENTIAL ENVIRONMENTAL CLEAN-UP/ENCAPSULATION OF ASPHALT
- USE OF RECYCLED MATERIALS



DUCTILCRETE INTERIOR TOPPING





THANK YOU

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